

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0027] on page 7 with the following paragraph:

[0027] A further modification could involve varying the ionomer distribution across the catalyst layer 12 to improve the performance of the MEA 24. According to another embodiment of the present invention, a thin ionomer layer 36 of an ionomer solution is sprayed on the membrane 14 by the sprayer 16 before the catalyst layer 12 is deposited. The catalyst ink 18 is then sprayed on the membrane 14 to deposit the catalyst layer 12. Thus, the ionomer spray goes directly into the membrane 14, and is not absorbed by a decal substrate or a diffusion media layer as in other processes known in the art. In this embodiment, the ink 18 includes a catalyst, solvent and half the ionomer concentration (ionomer/carbon ratio = 0.4/1). The final catalyst layer 12 including the ionomer layer ~~[[34]]~~ 36 yields a total ionomer/carbon ratio of approximately (0.8-1.2)/1.